

# **DBMS MICROPROJECT**

## **TODO LIST APPLICATION**

using Python and Oracle Database

**Department of Information Technology**

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## PROBLEM STATEMENT

To design and develop a Python GUI Application for TODO List System which performs adds, updates ,deletes and searches any task.

## PROBLEM DEFINITION

The main objective of the project is to allow a user to add, update, delete and search for tasks. The user needs to signup with their email id, password and then use the Todo List Application to enter different tasks scheduled on different dates and time of the day.

## CONCEPT & PROBLEM ANALYSIS

The Todo List Application is a user-friendly application that is easy to use. Also, colourful background and buttons makes it more appealing to user.

The Signup feature allows a new user open account in the application and use it. The login window makes it secure thus preventing others to see someone's tasks. Reset Password feature allows a user to reset their password and make it stronger.

The login details of user and the task details of each user is stored in the database which can be easily fetched for add, update, search and delete operations.

## DESIGN METHODOLOGY

The following modules were used for the completion of the project:

- The tkinter module was used to make the GUI for this project with background images.
- The tkcalendar module was used so that it provides the Calendar and DateEntry widgets for Tkinter.
- The ttk.Treeview widget was used to display a hierarchical collection of the tasks fetched from the database.

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- Frames were made with different background colours and borders to make the window appealing to the user.
- Colourful buttons and entry roots were made to make the application more appealing. Different foreground and background colours were also used.
- Active foreground and background colours were used so that it is not only appealing to the eyes but also the user can easily understand which button is being clicked

Also, message box are displayed :

- When any of the required field(s) are not filled and button is pressed a message box pops up to show “All the fields are required”.
- When either password or username is wrong and login button is pressed a message box pops up to show “Invalid login credentials”.
- When any operation is successfully performed message box pops up to show add/ update etc performed successfully.

Oracle has been used to make database.

The user after logging in can see their tasks saved and also add, update, delete or search tasks.

## RESULT AND DISCUSSION

The GUI Python Project for Todo List Application has been made using tkinter module. It helps an user to keep their tasks saved in a secured manner.

First a tkinter login window is displayed where an signed up user can login with their redentials. If an user has forgotten password they can reset it or update their password. If the user does not have an account they can signup from the signup window. The logging in facilty with password helps prevent othe users from accessing another user's data, also facilitates the use of the application by multiple users.

After a user has successfully logged in the user can click on show all button to display all tasks or search for any task based on the name of the task, user can add new tasks, update or delete any existing tasks by selecting it from the table displaying the tasks.

## REFERENCES AND BIBLIOGRAPHY

The following website and youtube videos were referred during the making of the project:

- <https://stackoverflow.com/>
- <https://www.geeksforgeeks.org/how-to-import-variables-from-another-file-in-python/>
- <https://www.youtube.com/watch?v=rHwHGeh4jz0>
- <https://www.youtube.com/watch?v=Il5ujscQ0ps>
- <https://www.youtube.com/watch?v=iOZNR6bCys&t=57s>

## ANNEXURES